

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number
WO 2004/037167 A2

- (51) International Patent Classification⁷: A61K (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/US2003/029853
- (22) International Filing Date: 22 September 2003 (22.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/419,639 18 October 2002 (18.10.2002) US
- (71) Applicant (*for all designated States except US*): MOLICHEM MEDICINES, INC. [US/US]; 100 Europa Drive, Suite 421, Chapel Hill, NC 27517 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): MOLINA, Luis [AR/US]; 3912 Kildrummy Drive, Durham, NC 27705 (US).
- (74) Agents: KNOWLES, Sherry, M. et al.; King & Spalding LLP, 191 Peachtree Street, 45th Floor, Atlanta, Georgia 30303-1763 (US).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 2004/037167 A2

(54) Title: METHODS OF TREATING DRY EYE DISEASE WITH LANTIBIOTICS

(57) Abstract: The treatment of dry eye disease with lantibiotics such as duramycin is described, along with pharmaceutical formulations useful for carrying out such treatments.